

CLAIMS

That which is claimed is:

1. A molding apparatus, comprising:
5 a mold (12,14) defining a plurality of mold cavities (34,36);
at least one first composition injector (30) fluidly connected to said plurality of mold cavities (34,36) for delivering a first composition from which molded articles can be formed; and
at least one second composition injector (32) fluidly connected to said
10 plurality of mold cavities (34,36) for delivering a second composition capable, upon curing, of forming an in-mold coating for said molded articles in said plurality of mold cavities (34,36).
2. The molding apparatus of claim 1 further comprising a sprue
15 passageway (38) fluidly connected to said at least one first composition injector (30) and a runner section (40) fluidly connected to said sprue passageway (38) and said plurality of mold cavities (34,36).
3. The molding apparatus of claim 2 wherein said runner section (40)
20 includes a plurality of portions (54,56) fluidly connected to each of said plurality of mold cavities (34,36) at a plurality of inlet orifices (58).
4. The molding apparatus of claim 3 wherein said runner section (40)
includes a tapered portion (60) adjacent each of said plurality of inlet orifices (58).
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5. The molding apparatus of any of claims 2 to 4 further comprising a
second injector passageway (62) fluidly connected to said at least one second
composition injector (32) and said runner section (40), said second injector
passageway (62) having a smaller cross-sectional area than said runner section
30 (40) adjacent an intersection (68) between said second injector passageway (62) and said runner section (40).
6. The molding apparatus of claim 5 wherein a portion of said runner
section adjacent said intersection (68) is flat.

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7. The molding apparatus of any of claims 1 to 6 wherein each of said plurality of mold cavities (34,36) has a volume that remains fixed throughout introduction of materials through said first and second composition injectors.

5 8. The molding apparatus of any of claims 2 to 7 wherein said runner section (40) includes a containment flange (40a) that directs composition injected from said at least one second composition injector (32) toward said plurality of mold cavities (34,36).

10 9. The molding apparatus of any of claims 1 to 9 wherein said plurality of mold cavities (34,36) is fluidly connected to only a single first composition injector (30) and to only a single second composition injector (32).